

System and Method for Using First-Principles Simulation to Control a Semiconductor Manufacturing Process

ABSTRACT OF THE DISCLOSURE

A method, system and computer readable medium for controlling a process performed by a semiconductor processing tool. The method includes inputting data relating to a process performed by the semiconductor processing tool, inputting a first principles physical model relating to the semiconductor processing tool, performing first principles simulation using the input data and the physical model to provide a first principles simulation result. The first principles simulation result is used to build an empirical model, and at least one of the first principles simulation result and the empirical model is selected to control the process performed by the semiconductor processing tool.

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